WHAT IS CLAIMED IS:

1. A storage media for storage of data thereon, the storage media comprising:

a first layer, the first layer being substantially transparent to a predetermined radiant energy used for reading the data; and

a second layer formed on the first layer and being substantially opaque to the radiant energy, the second layer having a pattern comprising a plurality of holes, each of the holes having a largest dimension which is greater than a wavelength of the radiant energy, the data being stored as the presence or absence of a hole in the pattern.

2. The storage media of claim 1, wherein the first layer is polycarbonate.

3. The storage media of claim 1, wherein the second layer is a metalization coating.

4. The storage media of claim 3, wherein the metalization coating is aluminum.

5. The storage media of claim 1, wherein the plurality of holes are circular and the largest dimension is a diameter of the circular holes.

6. The storage media of claim 1, wherein the pattern comprises the plurality of holes arranged along a helix beginning near a center of the storage media and extending spirally outward, each successive pass of the helix being separated from a

previous pass of the helix by a track pitch.

7. The storage media of claim 6, wherein the plurality of holes are circular and the largest dimension is a diameter of the circular holes, the diameter of the holes being in a range of about 30 to 100 nanometers.

8. The storage media of claim 6, wherein a distance between successive holes is in a range of about 30 to 100 nanometers.

9. The storage media of claim 6, wherein the track pitch is about 100 nanometers.

10. The storage media of claim 6, wherein the plurality of holes are circular and the largest dimension is a diameter of the circular holes, the diameter of the holes being about 50 nanometers, a distance between successive holes being about 100 nanometers, and the track pitch being about 100 nanometers.

11. The storage media of claim 6, wherein the plurality of holes are circular and the largest dimension is a diameter of the circular holes, the diameter of the holes being about 30 nanometers, a distance between successive holes is about 60 nanometers, and the track pitch being about 100 nanometers.

12. The storage media of claim 1, further comprising a third layer, the third layer being disposed on the second layer and being substantially transparent to the radiant energy.

13. The storage media of claim 12, wherein the third layer is acrylic.

14. The storage media of claim 1, wherein the storage media is circular in shape and has a data storage area having an inner diameter of about 25 millimeters and an outer diameter of about 115 millimeters.

15. A method for making a storage media having data stored thereon, the method comprising:

forming a first layer, the first layer being substantially transparent to a predetermined first radiant energy used for reading the data;

forming a second layer on the first layer which is substantially opaque to the first radiant energy; and

forming a pattern comprising a plurality of holes in the second layer, each of the holes having a largest dimension which is greater than a wavelength of the first radiant energy, the data being stored as the presence or absence of a hole in the pattern.

16. The method of claim 15, wherein the first layer is polycarbonate formed by a casting process.

17. The method of claim 15, wherein the second layer is a metalization coating formed by sputtering the metalization on the first layer.

18. The method of claim 15, wherein the plurality of holes are formed in a circular shape and the largest dimension is a diameter of the circular shaped holes.

19. The method of claim 15, wherein the pattern of the plurality of holes are arranged along a helix beginning near a

center of the storage media and extending spirally outward, each successive pass of the helix being separated from a previous pass of the helix by a track pitch.

20. The method of claim 19, wherein the plurality of holes are formed in a circular shape and the largest dimension is a diameter of the circular shaped holes, the diameter of the holes being in a range of about 30 to 100 nanometers.

21. The method of claim 19, wherein a distance between successive holes is in a range of about 30 to 100 nanometers.

22. The method of claim 19, wherein the track pitch is about 100 nanometers.

23. The method of claim 19, wherein the plurality of holes are formed in a circular shape and the largest dimension is a diameter of the circular shaped holes, the diameter of the holes being about 50 nanometers, a distance between successive holes being about 100 nanometers, and the track pitch being about 100 nanometers.

24. The method of claim 19, wherein the plurality of holes are formed in a circular shape and the largest dimension is a diameter of the circular shaped holes, the diameter of the holes being about 30 nanometers, a distance between successive holes is about 60 nanometers, and the track pitch being about 100 nanometers.

25. The method of claim 15, further comprising forming a third layer on the second layer, the third layer being substantially transparent to the first radiant energy.

26. The method of claim 15, further comprising forming the storage media in a circular shape and having a data storage area having an inner diameter of about 25 millimeters and an outer diameter of about 115 millimeters.

27. The method of claim 15, wherein the plurality of holes are formed by x-ray lithography.

28. The method of claim 15, wherein the plurality of holes are formed by melting material in the second layer.

29. The method of claim 15, wherein the plurality of holes are formed by ablating material in the second layer.

30. The method of claim 15, wherein the plurality of holes are formed by a second radiant energy having a wavelength less than a wavelength of the first radiant energy.

31. The method of claim 30, wherein the second radiant energy is selected from a group consisting of ultraviolet light, x-rays, and electron beams.

32. An apparatus for reading a storage media, the storage media comprising a first layer, the first layer being substantially transparent to a predetermined radiant energy used for reading the data; and a second layer formed on the first layer and being substantially opaque to the radiant energy, the second layer having a pattern comprising a plurality of data holes, each of the data holes having a largest dimension which is greater than a wavelength of the radiant energy, the data being stored as the presence or absence of a data hole in the pattern,

the apparatus comprising:

a radiant energy source having an output of radiant energy directed towards the plurality of data holes; and

a plurality of detectors for detecting the radiant energy diffusing from the plurality of data holes.

33. The apparatus of claim 32, wherein the radiant energy source is a blue laser diode.

34. The apparatus of claim 32, wherein the radiant energy source is an ultraviolet laser diode.

35. The apparatus of claim 32, wherein the radiant light source has a wavelength in the range of about 50 nanometers to 450 nanometers.

36. The apparatus of claim 35, wherein the radiant light source has a wavelength of about 410 nanometers.

37. The apparatus of claim 32, wherein the detectors are photodetectors.

38. The apparatus of claim 37, wherein the photodetectors are formed of a wide bandgap material.

39. The apparatus of claim 38, wherein the wide bandgap material is selected form a group consisting of silicon carbide, gallium arsenide, gallium nitride, aluminum nitride, zinc selenide, gallium nitride/aluminum nitride alloy, aluminum nitride/silicon carbide alloy and aluminum gallium nitride/gallium nitride.

40. The apparatus of claim 32, further comprising a mask positioned between the storage media and the detectors for reducing interference from the radiant energy diffusing through unintended data holes.

41. The apparatus of claim 40, wherein the mask comprises a material having a pattern of mask holes arranged to restrict the number of data holes observed by a single detector.

42. The apparatus of claim 41, wherein the mask holes are rectangular in shape and have a smaller side dimension approximately equal to the largest dimension of the data holes.

43. The apparatus of claim 32, wherein the radiant energy source is positioned on the side of the storage media having the first layer and is directed towards the detectors that are positioned on the side of the storage media opposite the first layer.

44. A method for reading a storage media, the storage media comprising a first layer, the first layer being substantially transparent to a predetermined radiant energy used for reading the data; and a second layer formed on the first layer and being substantially opaque to the radiant energy, the second layer having a pattern comprising a plurality of data holes, each of the data holes having a largest dimension which is greater than a wavelength of the radiant energy, the data being stored as the presence or absence of a data hole in the pattern, the method comprising:

directing radiant energy from a radiant energy source towards the plurality of data holes; and

detecting the radiant energy diffusing from the data

holes with a plurality of detectors.

45. The method of claim 44, wherein the radiant energy source is a blue laser diode.

46. The method of claim 44, wherein the radiant energy source is a ultraviolet laser diode.

47. The method of claim 44, wherein the radiant light source has a wavelength in the range of about 50 nanometers to 450 nanometers.

49. The method of claim 47, wherein the radiant light source has a wavelength of about 410 nanometers.

49. The method of claim 44, wherein the detectors are photodetectors.

50. The method of claim 49, wherein the photodetectors are formed of a wide bandgap material.

51. The method of claim 50, wherein the wide bandgap material is selected form a group consisting of silicon carbide, gallium arsenide, gallium nitride, aluminum nitride, zinc selenide, gallium nitride/aluminum nitride alloy, aluminum nitride/silicon carbide alloy and aluminum gallium nitride/gallium nitride.

52. The method of claim 44, further comprising a mask positioned between the storage media and the detectors for reducing interference from the radiant energy diffusing through unintended data holes.

53. The method of claim 52, wherein the mask comprises a material having a pattern of mask holes arranged to restrict the number of data holes observed by a single detector.

54. The method of claim 53, wherein the mask holes are rectangular in shape and have a smaller side dimension approximately equal to the largest dimension of the data holes.

55. The method of claim 44, wherein the radiant energy source is positioned on the side of the storage media having the first layer and is directed towards the detectors which are positioned on the side of the storage media opposite the first layer.